

## § 62.45

display even numbers, and green aids display odd numbers.

[CGD 86-031, 52 FR 42640, Nov. 6, 1987, as amended by CGD 88-018, 54 FR 48608, Nov. 24, 1989]

### § 62.45 Light characteristics.

(a) Lights on aids to navigation are differentiated by color and rhythm. Lighthouses and range lights may display distinctive light characteristics to facilitate recognition. No special significance should be attached to the color or rhythm of such lights. Other lighted aids to navigation employ light characteristics to convey additional information.

(b) When proceeding in the Conventional Direction of Buoyage, aids to navigation, if lighted, display light characteristics as follows:

(1) Green lights mark port (left) sides of channels and locations of wrecks or obstructions which are to be passed by keeping these lights on the port (left) hand of a vessel. Green lights are also used on Preferred Channel Marks where the topmost band is green.

(2) Red lights mark starboard (right) sides of channels and locations of wrecks or obstructions which are to be passed by keeping these lights on the starboard (right) hand of a vessel. Red lights are also used on Preferred Channel Marks where the topmost band is red.

(3) Certain lights marking the Intracoastal Waterway may display reversed lateral significance. See § 62.49.

(c) Yellow lights have no lateral significance. Except on the Western Rivers, see § 62.51, white lights have no lateral significance. The purpose of aids exhibiting white or yellow lights may be determined by their shape, color, letters or numbers, and the light rhythm employed.

(d) Light rhythms, except as noted in § 62.51 for the Western Rivers, are employed as follows:

(1) Aids with lateral significance display regularly flashing or regularly occulting light rhythms. Ordinarily, flashing lights (frequency not exceeding 30 flashes per minute) will be used.

(2) Preferred Channel Marks display a composite group flashing light rhythm (groups of two flashes followed by one flash).

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(3) Safe Water Marks display a white Morse Code "A" rhythm (short-long flash).

(4) Isolated Danger Marks display a white group flashing two.

(5) Special Marks display yellow lights with fixed or slow flashing rhythm preferred.

(6) Mooring Buoys and Information and Regulatory Marks display white lights of various rhythms.

(7) For situations where lights require a distinct cautionary significance, as at sharp turns, sudden channel constrictions, wrecks, or obstructions, a quick flashing light rhythm (60 flashes per minute) may be used.

(e) Occasionally lights use sectors to mark shoals or warn mariners of other dangers. Lights so equipped show one color from most directions and a different color or colors over definite arcs of the horizon as indicated on the appropriate nautical chart. These sectors provide approximate bearing information since the observer should note a change of color as the boundary between the sectors is crossed. As sector bearings are not precise, they should be considered a warning only and not used to determine exact bearing to the light.

(f) Aids to navigation may be fitted with light-reflecting material to increase their visibility in darkness. Green or red reflective material is used only on marks which, if lighted, would exhibit a light of that color. Yellow reflective material is used on special marks and on Intracoastal Waterway marks. No significance is attached to white reflective material.

[CGD 86-031, 52 FR 42640, Nov. 6, 1987, as amended by CGD 88-018, 54 FR 48608, Nov. 24, 1989; CGD 97-018, 63 FR 33573, June 19, 1998]

### § 62.47 Sound signals.

(a) Often sound signals are located on or adjacent to aids to navigation. When visual signals are obscured, sound signals warn mariners of the proximity of danger.

(1) Sound signals are distinguished by their tone and phase characteristics.

(i) Tones are determined by the devices producing the sound (i.e., diaphones, diaphragm horns, reed horns, sirens, whistles, bells and gongs).

(ii) Phase characteristics are defined by the signal's sound pattern, i.e., the number of blasts and silent periods per minute and their durations. Sound signals emanating from fixed structures generally produce a specific number of blasts and silent periods each minute when operating. Buoy sound signals are generally actuated by the motion of the sea and therefore do not emit a regular signal characteristic.

(2) Where no live watch is maintained, sound signals are normally operated continuously. However, some are equipped with fog detectors which activate sound signals when visibility falls below a predetermined limit.

(b) Mariners should not rely solely on sound signals to determine their positions for the following reasons:

(1) Distance cannot be accurately determined by sound intensity.

(2) Occasionally sound signals may not be heard in areas close to their location.

(3) Signals may not sound in cases where fog exists close to, but not at, the location of the sound signal.

(4) As buoy signals are generally activated by sea motion, they may produce no signals when seas are calm.

(5) As previously noted, buoy positions are not always reliable. Therefore their sound signals cannot be assumed to be emanating from a fixed position.

#### **§62.49 Intracoastal Waterway identification.**

(a) In addition to the conventional signals, aids to navigation marking the Intracoastal Waterway exhibit unique yellow symbols to distinguish them from aids marking other waters.

(1) Yellow triangles indicate that aids to navigation so marked should be passed keeping them on the starboard (right) hand of a vessel, regardless of the aid's number, color, or light color.

(2) Yellow squares indicate that aids to navigation so marked should be passed keeping them on the port (left) hand of a vessel, regardless of the aid's number, color, or light color.

(3) A horizontal yellow band provides no lateral information, but simply identifies aids to navigation as marking the Intracoastal Waterway.

(b) The above guidelines apply for vessels traversing the Intracoastal Wa-

terway in a southerly direction on the Atlantic Coast, in a westerly direction on the Okeechobee Waterway, or in a westerly direction along the Gulf Coast.

[CGD 86-031, 52 FR 42640, Nov. 6, 1987; CGD 86-031, 52 FR 46351, Dec. 5, 1987]

#### **§62.51 Western Rivers Marking System.**

(a) A variation of the standard U.S. aids to navigation system described above is employed on the Mississippi River and tributaries above Baton Rouge, LA and on certain other rivers which flow toward the Gulf of Mexico.

(b) The Western Rivers System varies from the standard U.S. system as follows:

(1) Buoys are not numbered.

(2) Numbers on beacons do not have odd/even lateral significance but, rather, indicate mileage from a fixed point (normally the river mouth).

(3) Diamond-shaped non-lateral dayboards, checkered red-and-white or green-and-white, similar to those used in the U.S. Aids to Navigation System, as appropriate, are used as crossing dayboards where the river channel crosses from one bank to the other.

(4) Lights on green buoys and on beacons with green daymarks show a single flash which may be green or white.

(5) Lights on red buoys and on beacons with red daymarks show a double flash [Group Flashing (2)] which may be red or white.

(6) Isolated danger marks are not used.

[CGD 86-031, 52 FR 42640, Nov. 6, 1987, as amended by CGD-94-091, 61 FR 27782, June 3, 1996; USCG-2001-9286, 66 FR 33640, June 25, 2001]

#### **§62.53 Racons.**

(a) Aids to navigation may be enhanced by the use of radar beacons (racons). Racons, when triggered by a radar signal, will transmit a coded reply to the interrogating radar. This reply serves to identify the aid station by exhibiting a series of dots and dashes which appear on the radar display in a line emanating radially from just beyond the echo of the aid station. Although racons may be used on both laterally significant and non-laterally significant aids alike, the racon signal